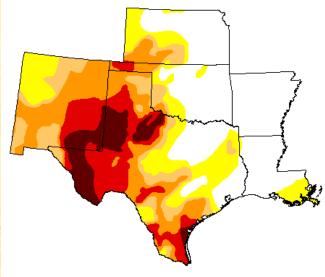
MANAGENG DROUGHI

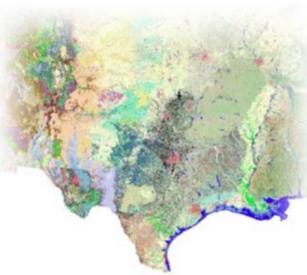
IN THE SOUTHERN PLAINS

April 12, 2012

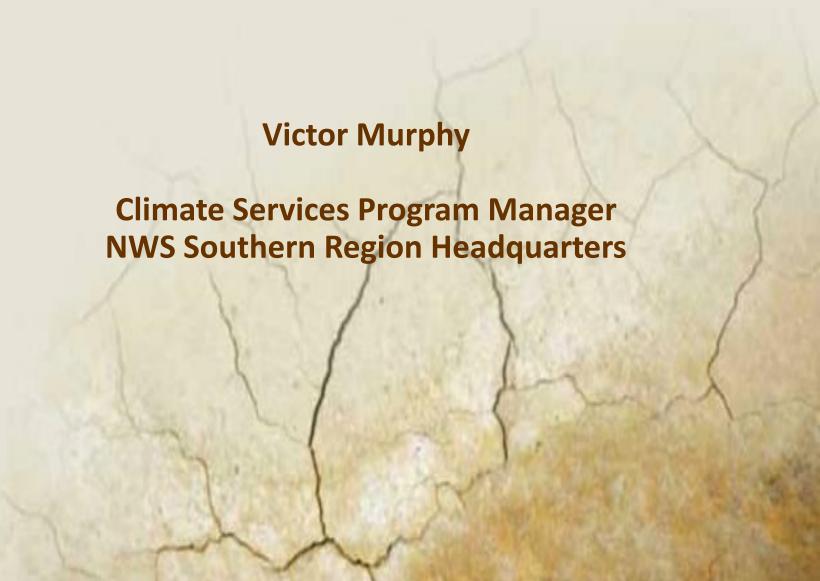
Upcoming Meetings

- Southern Plains Drought Outlook & Assessment Forum
 Lubbock, April 26
 - RSVP to Toni Parham at toni.parham@noaa.gov
 - assess the current drought status, its historic nature, and the short- and long-term weather and climate outlooks for possible relief;
 - identify key impacts from the drought on a range of physical and socioeconomic systems;
 - discuss the use of climate information, products, and services in response to this and previous droughts, and identify opportunities for improved mitigation and adaptation efforts in the future
- South Central Climate Science Center Roll-out meetings:
 - Albuquerque, April 17
 - Tulsa, April 26
 - Houston/Galveston, TBD
 - More being scheduled for summer
 - More information: http://southcentralclimate.org



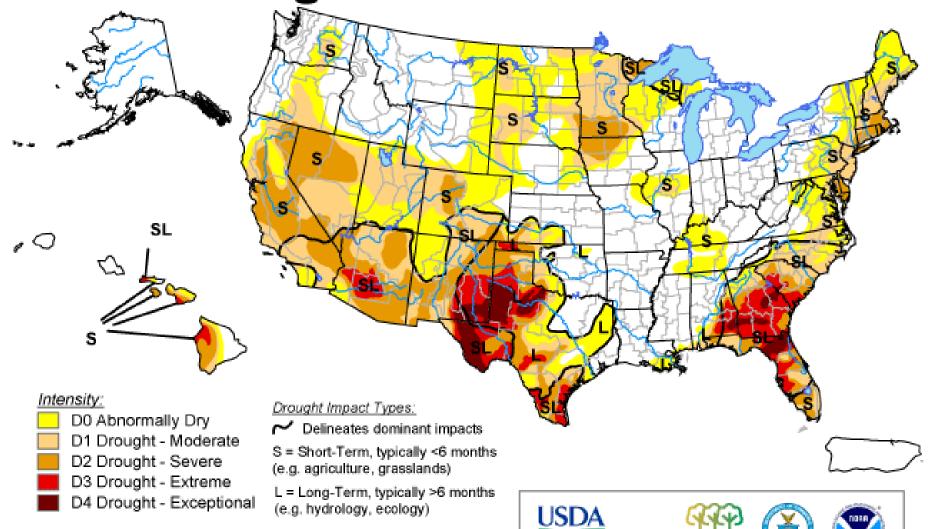


Regional Drought Monitor Update



U.S. Drought Monitor

April 10, 2012



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu/

Released Thursday, April 12, 2012 Author: David Miskus, NOAA/NWS/NCEP/CPC

U.S. Drought Monitor

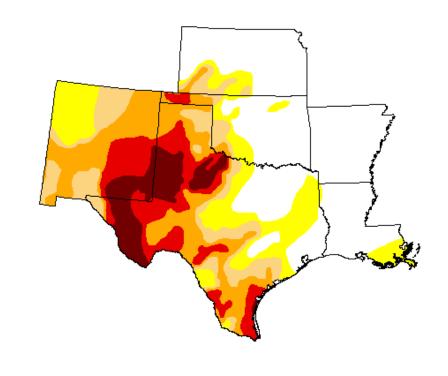
April 10, 2012

Valid 7 a.m. EST

South Central United States

Drought Conditions (Percent Area)

	None	D0 - D4	D1 - D4	D2 - D4	D3 - D4	D4
Current	39.05	60.95	45.57	33.91	18.04	7.29
Last Week (4/3/2012)	35.62	64.38	47.48	36.28	19.65	7.55
3 Months Ago (1/10/2012)	16.93	83.07	76.74	60.47	36.80	12.37
1 Year Ago (4/5/2011)	1.66	98.34	89.00	67.70	37.06	2.00



<u>Intensity:</u>



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forcast statements.

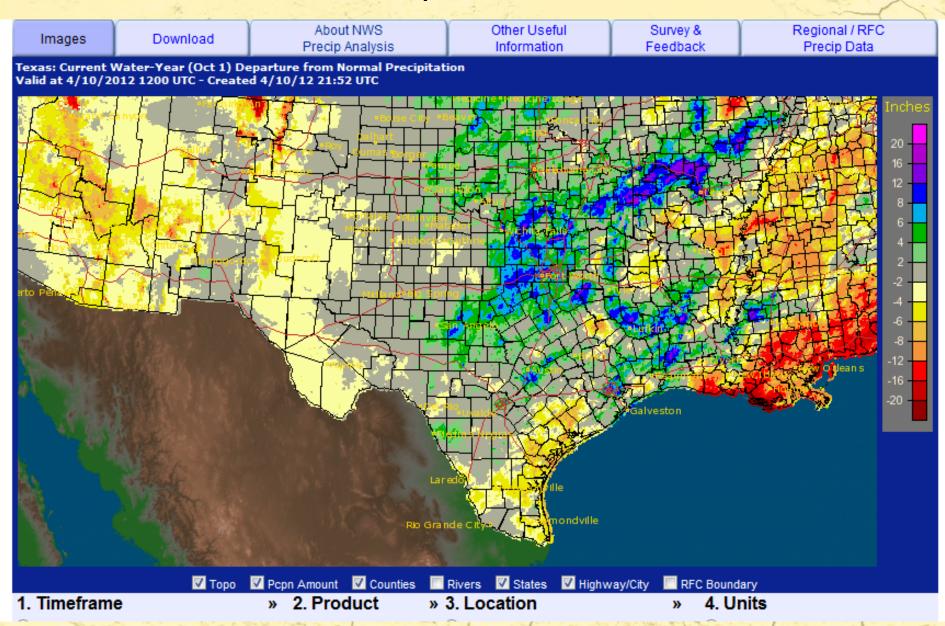


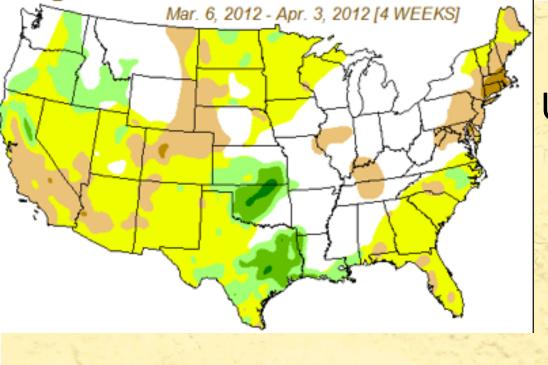




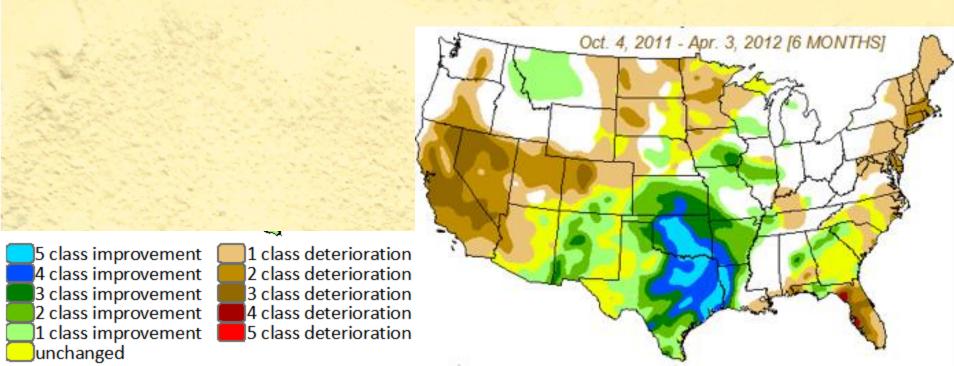


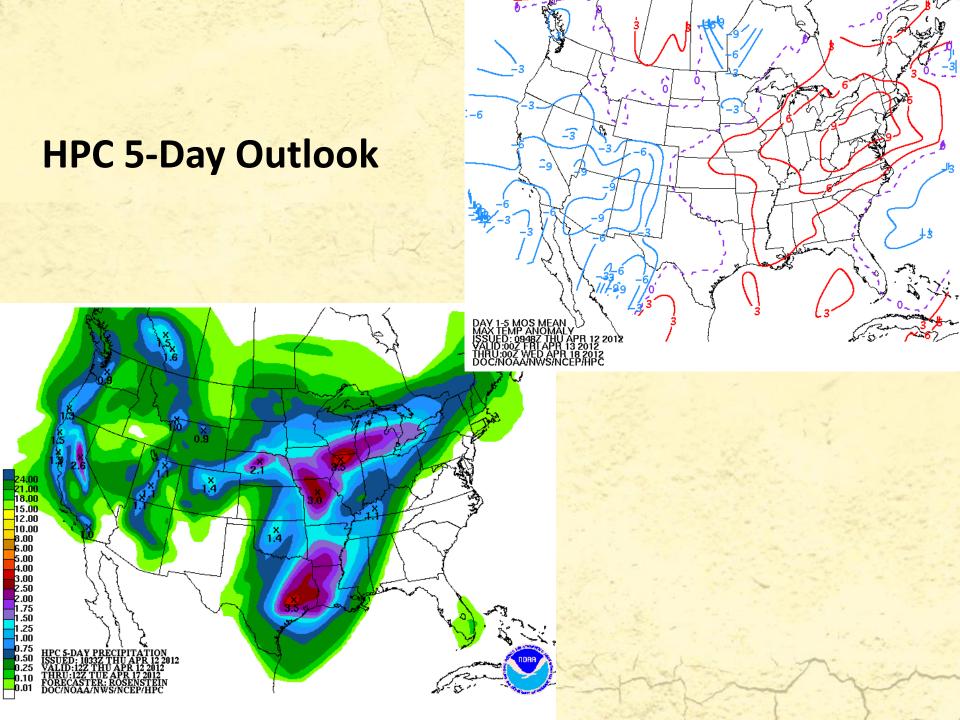
Water Year Departure from Normal

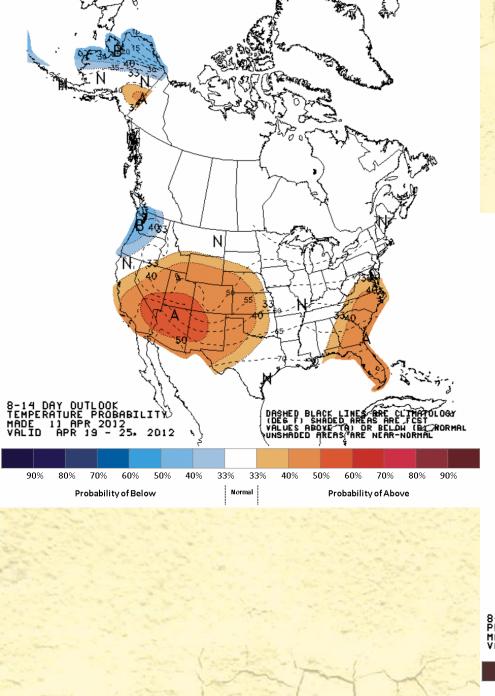




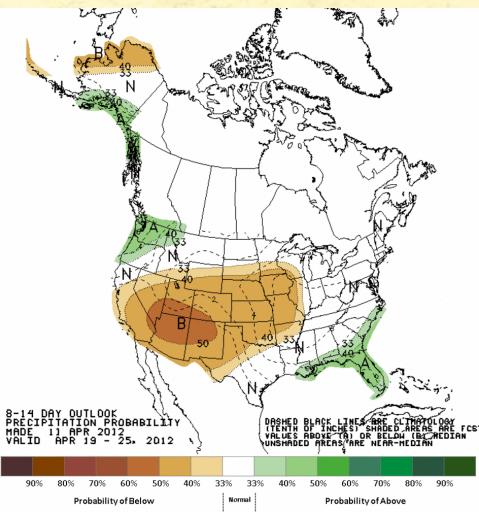
U.S. Drought Monitor Change Maps



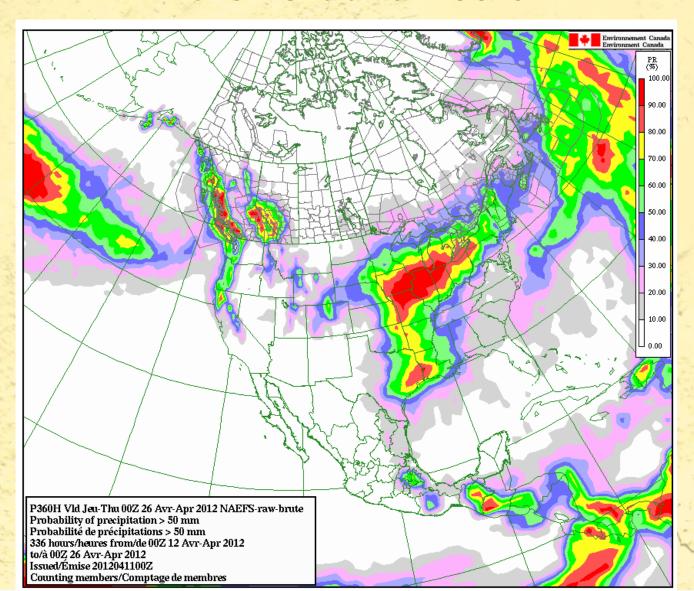


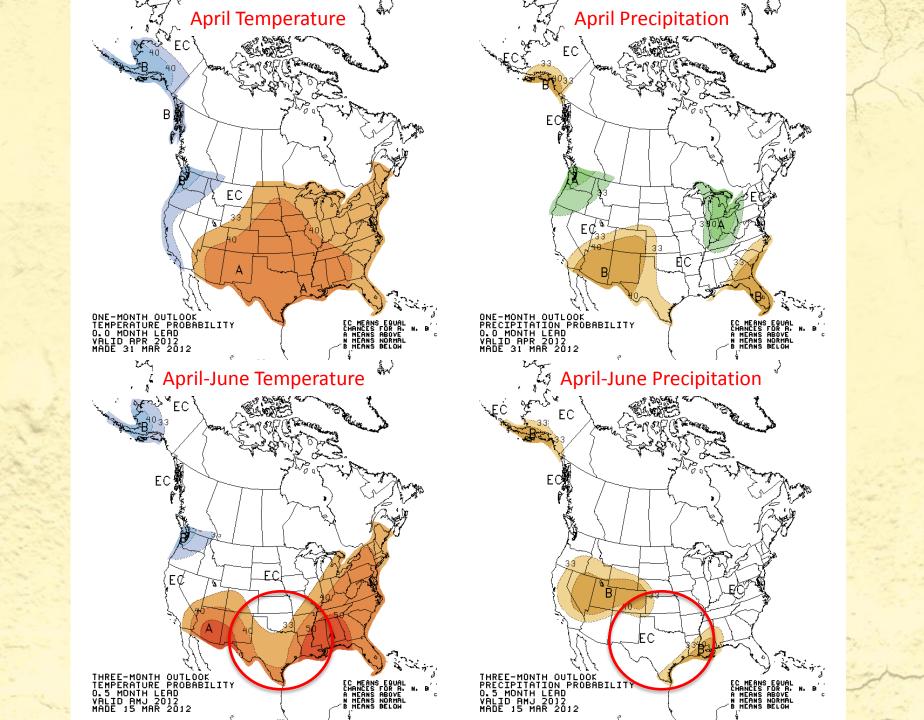


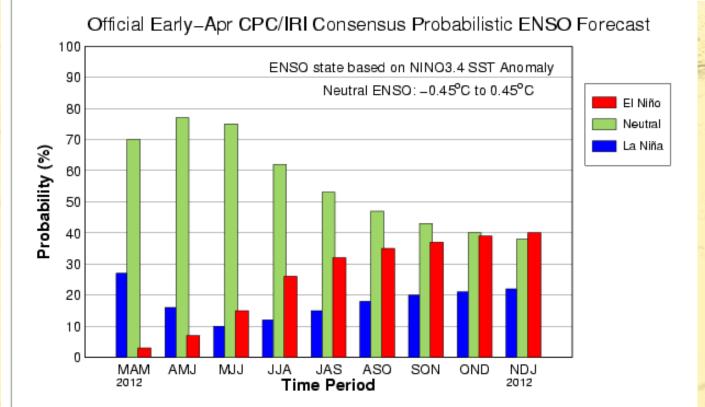
CPC 8-14-Day Outlooks



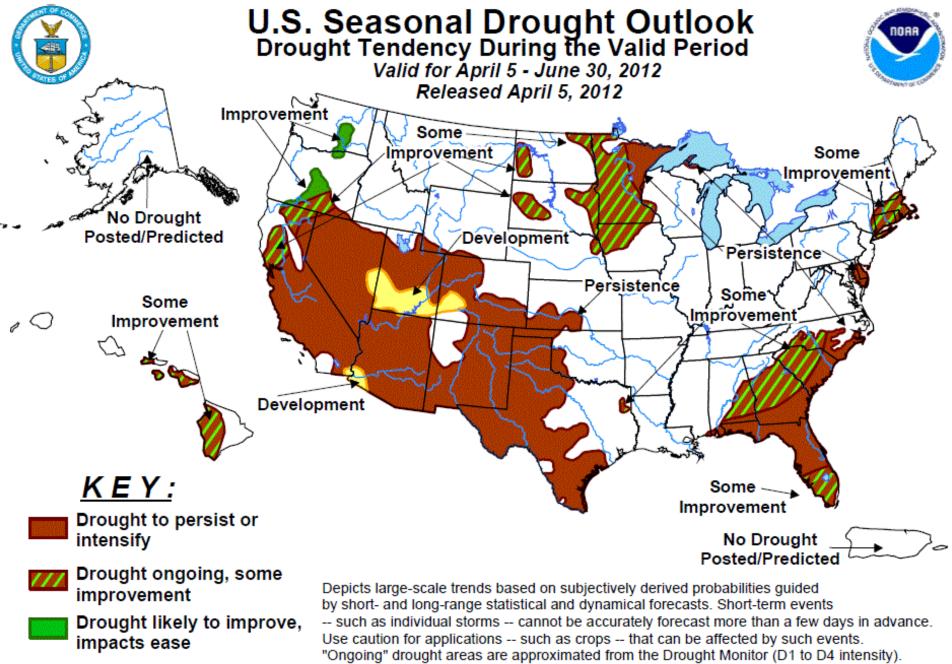
Probability of Receiving 2" or more rainfall in the next two weeks







Season	La Niña	Neutral	El Niño	
MAM 2012	27%	70%	3%	
AMJ 2012	16%	77%	7%	
МЈЈ 2012	10%	75%	15%	
JJA 2012	12%	62%	26%	
JAS 2012	15%	53%	32%	
ASO 2012	18%	47%	35%	
SON 2012	20%	43%	37%	
OND 2012	21%	40%	39%	
NDJ 2012 22%		38%	40%	



Drought development For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, likely but do not necessarily imply drought elimination.

Contact Information:



Gulf Coast Prairie Landscape Conservation Cooperative

4/12/2012

Shared Landscapes Conservation Clearinghouse

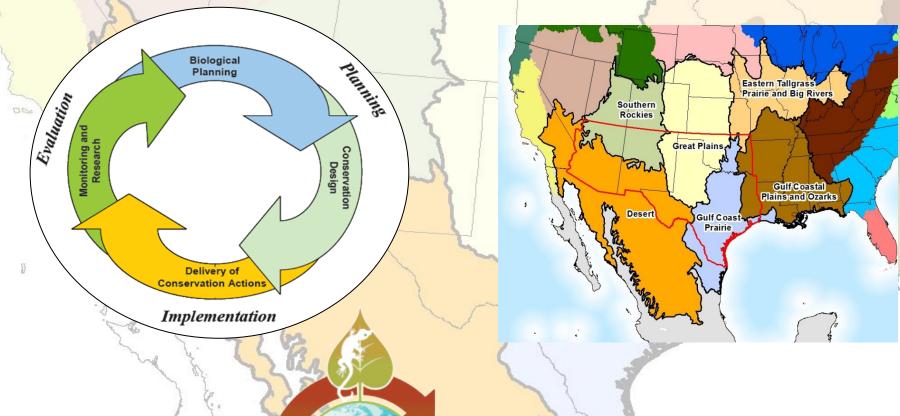
Desert, Great Plains, GCPO, TGP

Value of Partnership – TTT

Bill Bartush
GCP LCC Coordinator
USFWS Southwest Region
(Bill Batush@fws.gov



What We Do





Gulf Coast Prairie LCC

Description

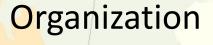
- Includes several federal agency regions
- 5 states & Mexico
- 3 Ecological Regions
 - Oaks & Prairies
 - Gulf Coast
 - Tamaulipan Brushlands
- Population 25 Million
 - Expanding & complex
- Water, Drought & Fire







Gulf Coast Prairie LCC



- Initiated FY10
- Steering Committee
 - 17 members
 - Active Collaboration
 - Priority Science Needs
 - Chaired by TPWD
 - Carter Smith







Gulf Coast Prairie LCC







Collaboration

- 2 Fish Habitat Partnerships
- 3 Joint ventures
- USGS and NOAA
 - Shared Positions
 - NWRC Support
- TAMU CESU & Communication
- WMI Science Process

Managing Drought in the Southern Plains, April 12, 2012

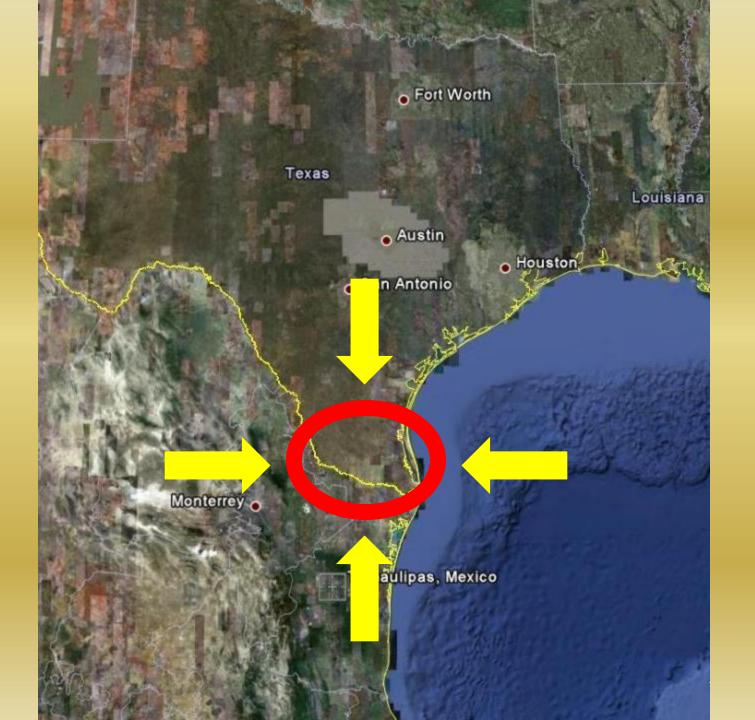
Adaptations for Wildlife on South Texas Refuges During Drought

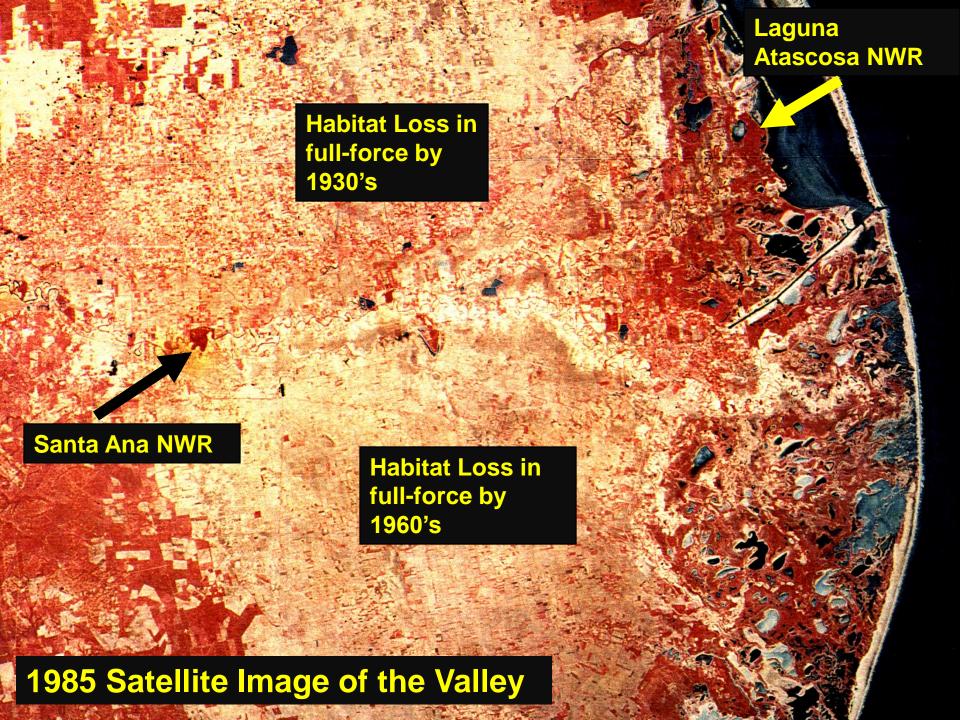
Mitch Sternberg*, Jody Mays



*South Texas Refuge Complex Alamo, Texas Phone 956-784-7592 Mitch_Sternberg@fws.gov



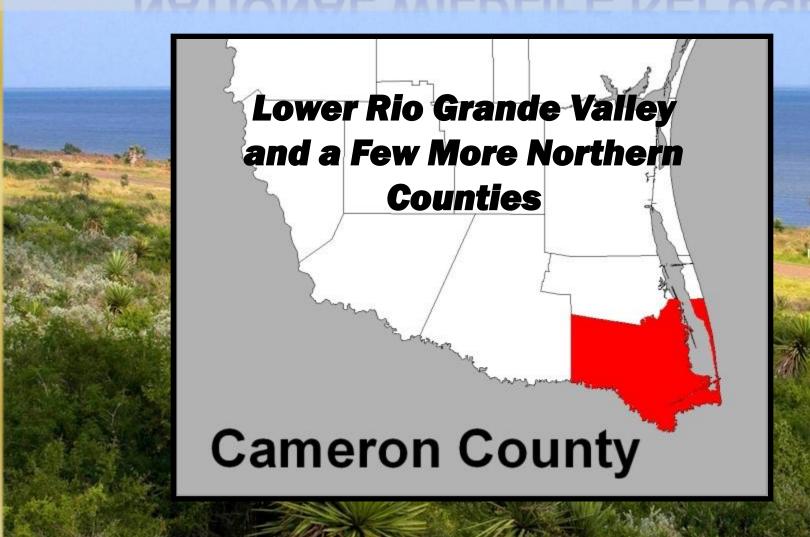


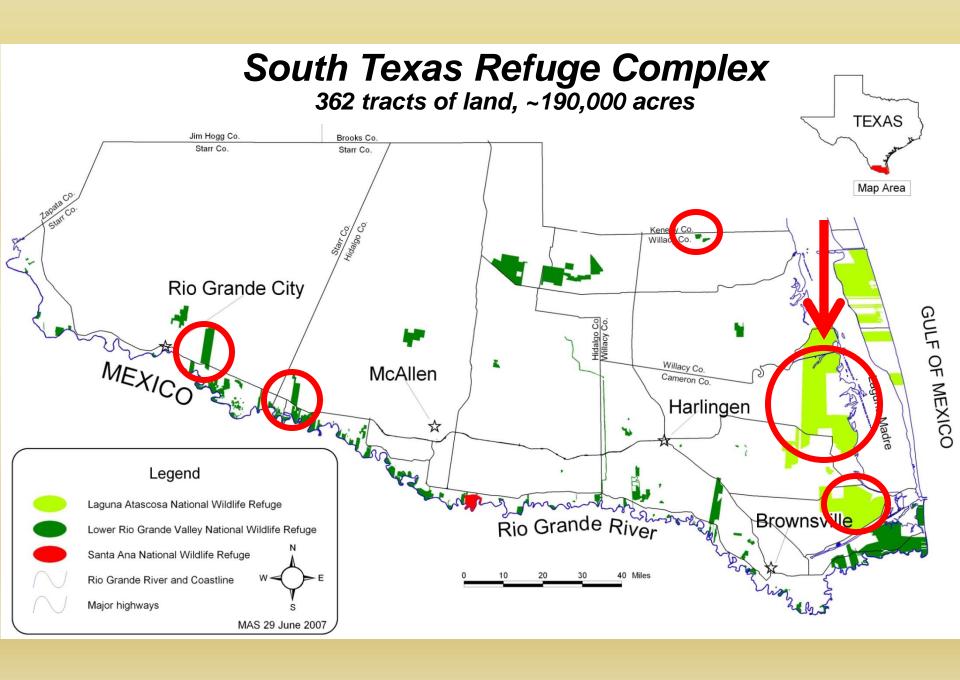






LAGUNA ATASCOSA NATIONAL WILDLIFE REFUGE

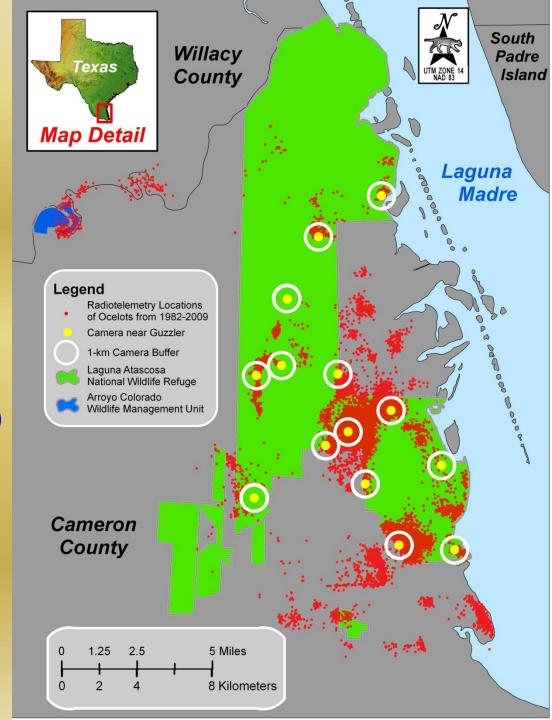




Laguna Atascosa National Wildlife Refuge

- Established in 1947
- >85% wintering Redhead ducks
- ❖1 of 2 U.S. ocelot pop's
- ❖Drought concerns ~2003
- 414 Guzzlers (w/cameras)





- Drought may reduce breeding of <u>ocelots</u> >50%
- South Texas has been in a drought since 2005
- Ocelots have been declining since late 1990's



- Provide freshwater for all wildlife.....
-but limit access by invasive species

Design of Guzzlers/Rain-catchments



Design of Guzzlers/Rain-catchments 600gal. tank "Drinker Gudde back. 1/22/10 4:39 PM





"Caught Conspiring on World Domination"











Recent publication on Ocelots, CatNews or...

U.S. Fish & Wildlife Service





South Texas Refuge Complex Laguna Atascosa National Wildlife Refuge

Ocelots in Laguna Atascosa National Wildlife Refuge

Mitch A. Sternberg¹ and Jody L. Mays²

ABSTRACT - From November 18, 2009 to February 15, 2010 we used paired camera traps to photograph ocelots in Laguna Atascosa National Wildlife Refuge and the surrounding area. Eleven adult ocelots (8 male, 3 female) and two kittens (estimated age <1 year)

popration, were documented, as well can adult male, previously unknown to this popration, were documented, as well can adult male that ad not been documented in 4 years of the can be a local to be a

0.09 ocelots/km². As part of a long-term ocelot recovery effort, the U.S. Fish and Wildlife Service continues to increase available habitat through acquisition and restoration while acting to minimize threats such as vehicle-caused mortalities.

(http://www.iucnredlist.org). In the USA, ocelots occur in Arizona and Texas, where a breeding population has been monitored since the 1980s. Ocelots are listed as a

federally-endangered species (U.S. Fish & Wildlife Service [USFWS] 1982). Primary factors in the USA contributing to the endangered status of the ocelot include habitat loss, habitat fragmentation, population isolation, loss of genetic diversity among Texas ocelots (Walker 1997, Janečka et al. 2008), and collisions with vehicles (Haines et al. 2005a).

Dense woodlands form the primary habitat for South Texas ocelots (Navarro-Lopez 1985, Tewes 1986, Laack 1991, Shindle & Tewes 1998), yet over 90% of dense woodlands in the area have been destroyed or significantly altered since the 1900's (Jahrsdoerfer & Leslie 1988, Tremblay et al. 2005). Habitat loss and fragmentation continues today due to urban expansion, conversion of large ranches to other uses,

South Texas Refuge Complex, Mitch Sternberg@fws.gov

² Laguna Atascosa National Wildlife Refuge, Jody Mays@fws.gov

2011 and Beyond: Impacts on Waterfowl

Todd Merendino

Manager of Conservation Programs

Ducks Unlimited Texas Field Office

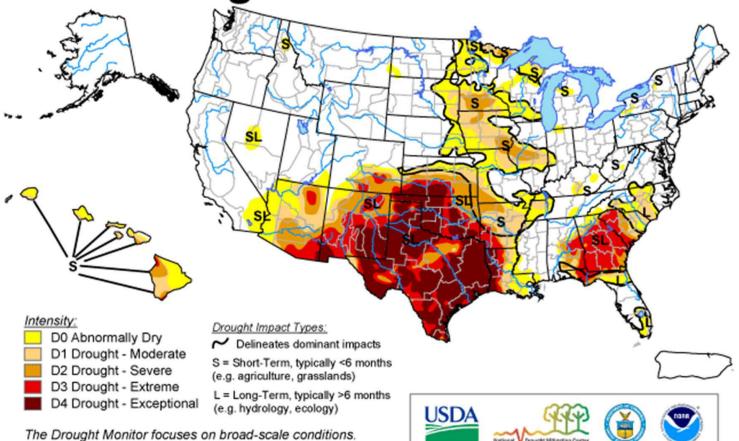
tmerendino@ducks.org





U.S. Drought Monitor

October 11, 2011



How bad was 2011 Texas Drought?

October 2010 – September 2011 was driest period on record

½ billion trees died

Devastating losses to agriculture and livestock

Lake Meredith 1999 and 2011



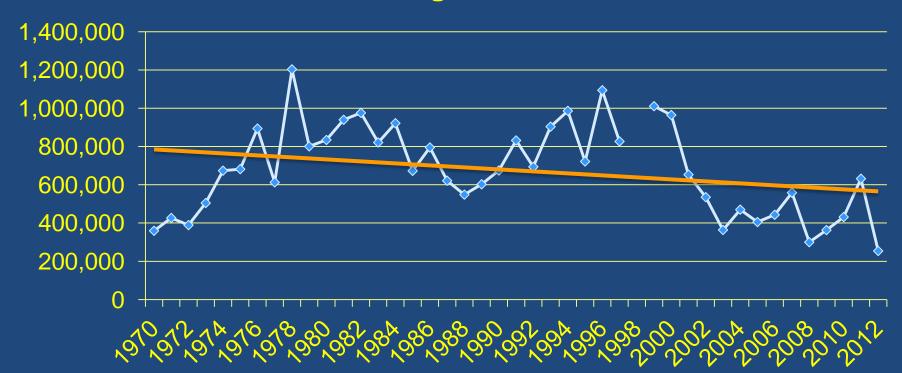
Above: Harbor Bay at Lake Meredith, Texas 1999 (50 feet deep in center at this location)
Below: same location 2011 (small portion of the Lake can still be seen, notice the dust)

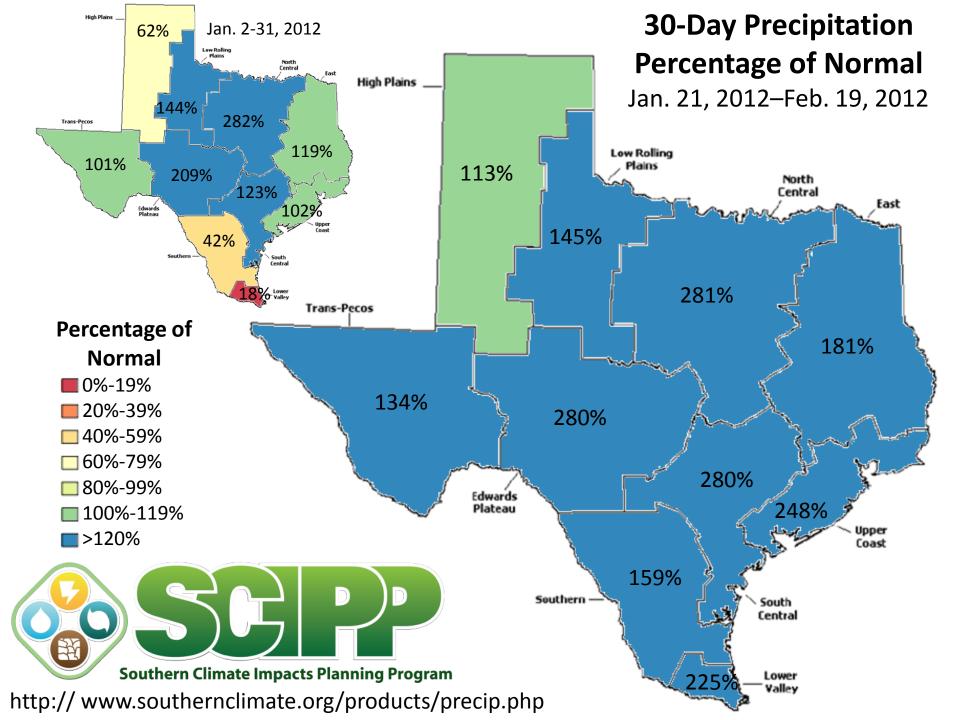


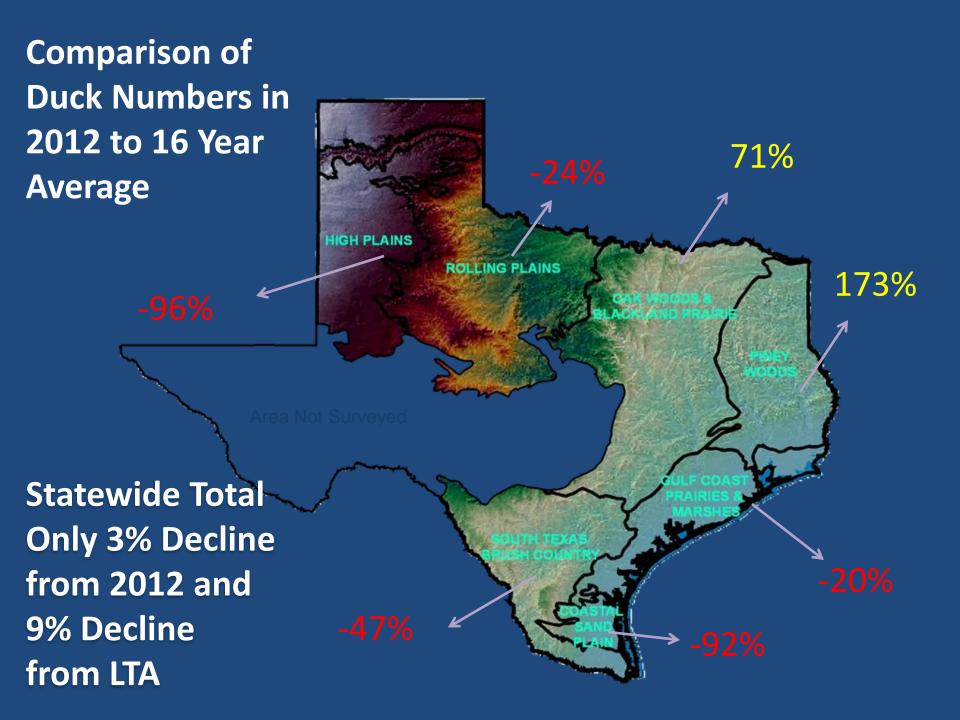
Geese

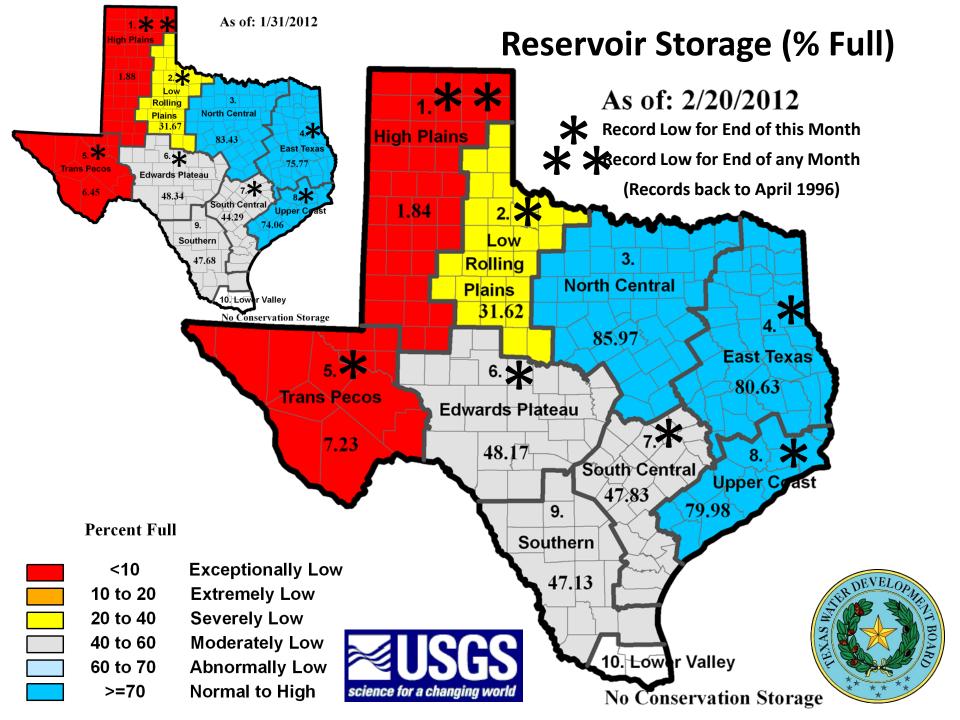
State Wide Goose Numbers Were Down 40% from 2012 Lowest Coastal Goose Survey on Record

Texas Coastal Light Goose Estimates



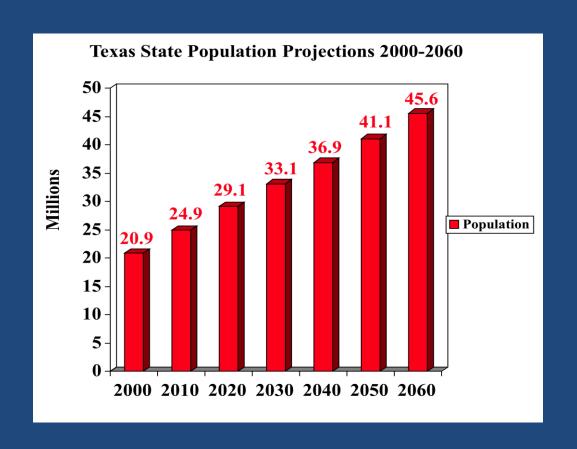




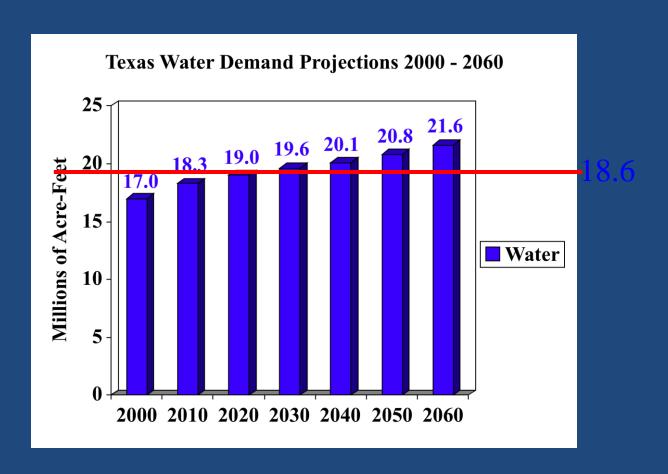


Potential Water Supply Crises by 2025 (Areas where existing supplies are not adequate to meet water demands for people, for farms, and for the environment) Olympia Bismarck Helena * Salem Pierre Boise Cheyenne Salt Lake Carson City Sacramento Lincoln Denver State Capitols Topeka Major Cities Major Rivers Indian Lands and Native Entities Oklahoma Los Angeles States City Unmet Rural Water Needs Phoenix Conflict Potential-- Moderate Conflict Potential-- Substantial Conflict Potential-- Highly Likely 280 70 140 420 May 2003

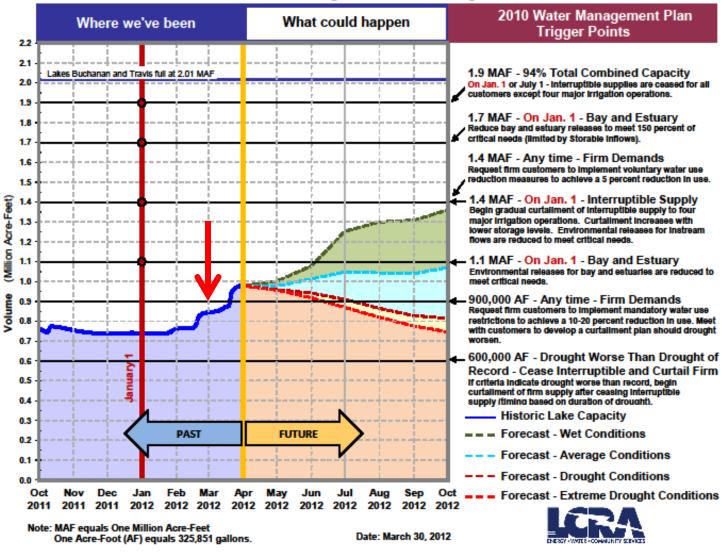
More Texans!



Water Demand Projections

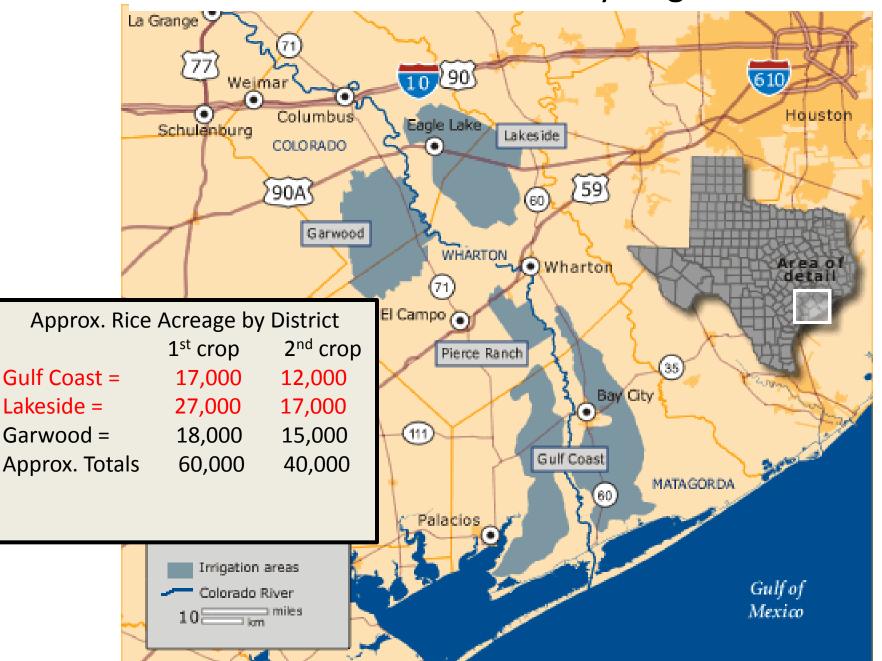


Highland Lakes Storage



Storage levels on March 1 were less than 850,000 acre feet, thus no irrigation Water released in Gulf Coast or Lakeside districts; partial release for Garwood

Lower Colorado River Authority Irrigation Districts



Resources

- U.S. Drought Portal
 - http://www.drought.gov
- Southern Plains Information & Past Webinars
 - http://www.drought.gov/portal/server.pt/community/southern_plains
- Drought Impact Reporter
 - http://droughtreporter.unl.edu/
- State Climatologists
 - http://www.stateclimate.org/
- National Drought Mitigation Center
 - http://drought.unl.edu/
- Southern Climate Impacts Planning Program (SCIPP)
 - http://www.southernclimate.org/
 - YouTube: http://www.youtube.com/user/SCIPP01
- Climate Assessment for the Southwest (CLIMAS)
 - http://www.climas.arizona.edu/



We are now on Facebook!
Southern Climate Impacts Planning Program

Is drought properly classified in your region? If not, let us know!

- Drought Impact Reporter
- Contact your State Climatologist
- •E-mail the DM Authors: droughtmonitor@unl.edu